

IN THE CLAIMS:

Please amend the following claims:

1. (Amended) A cloned DNA sequence [encoding a polypeptide] of *hap* gene, wherein the sequence has the formula:

ATGTTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGGCAAATCCTGGATTCTACACTGCGAGT
CCGTCTTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGAA
TGGCAGCATCGGCACACTGCTCAATCAATTGAAACACAGAGCACCAGCTCTGAGGAACTCGTCCCA
AGCCCCCATCTCCACTTCCTCCCCCTCGAGTGATCAAACCCTGCTTCGTCTGCCAGGACAAATCA
TCAGGGTACCACTATGGGGTCAGCGCTGTGAGGGATGAAGGGCTTTTCCGCAGAAGTATTCAGA
AGAATATGATTTACACTTGTCAACGAGATAAGAACTGTGTTATTAATAAAGTCACCAGGAATCGAT
GCCAATACTGTGACTCCAGAAGTGCTTTGAAGTGGGAATGTCCAAAGAATCTGTCAGGAATGACA
GGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGCACAGAGAGCTATGAAATGACAGCTGAGT
TGGACGATCTCACAGAGAAGATCCGAAGCTCACCAGGAACTTTCCCTTCACTCTCGCAGCTGG
GTAAATACACCACGAATTCAGTGCTGACCATCGAGTCCGACTGGACCTGGGCCTCTGGGACAAAT
TCAGTGAAC TGGCCACCAAGTGCATTATTAAGATCGTGGAGTTTGCTAAACGTCTGCCTGGTTTCA
CTGGCTTGACCATCGCAGACCAAATTACCCTGCTGAAGGCCGCCTGCCTGGACATCCTGATTCTTA
GAATTTGCACCAGGTATACCCCAGAACAAGACACCATGACTTTCTCAGACGGCCTTACCCTAAATC
GAACTCAGATGCACAATGCTGGATTTGGTCCTCTGACTGACCTTGTGTTACCTTTGCCAACCAGC
TCCTGCCTTTGGAAATGGATGACACAGAAACAGGCCTTCTCAGTGCCATCTGCTTAATCTGTGGAG
ACCGCCAGGACCTTGAGGAACCGACAAAAGTAGATAAGCTACAAGAACCATTGCTGGAAGCACTAA
AAATTTATATCAGAAAAAGACGACCCAGCAAGCCTCACATGTTTCCAAAGATCTTAATGAAAATCA
CAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGTAATTACCTTGAAAATGGAAATTCCTG
GATCAATGCCACCTCTCATTCAGAAATGATGGAGAATTCTGAAGGACATGAACCCTTGACCCAA
GTTCAAGTGGGAACACAGCAGAGCACAGTCCTAGCATCTCACCAGCTCAGTGGAAAACAGTGGGG
TCAGTCAGTCACCACTCGTGCAATAA,

wherein said DNA is in an isolated and purified form and encodes a
retinoic acid receptor comprising a DNA binding domain and a
hormone binding domain.

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- ✓ In claim 4, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 5, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 6, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 7, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 8, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 9, line 1, delete "1" and insert --57-- therefor.
- ✓ In claim 12, line 1, delete "9" and insert --11-- therefor.
- ✓ In claim 13, line 1, delete "9" and insert --11-- therefor.
- ✓ In claim 14, line 1, delete "9" and insert --11-- therefor.

24. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof encoding a polypeptide capable of binding retinoic acid and functioning as a receptor from a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim 1.

- ✓ In claim 25, line 1, delete "20" and insert --24-- therefor.
 - ✓ In claim 26, line 1, delete "21" and insert --25-- therefor.
 - ✓ In claim 27, line 1, delete "20" and insert --24-- therefor.
 - ✓ In claim 28, line 1, delete "23" and insert --27-- therefor.
 - ✓ In claim 29, line 1, delete "20" and insert --24-- therefor.
 - ✓ In claim 30, line 1, delete "25" and insert --29-- therefor.
 - ✓ In claim 33, line 2, delete "DNA" and insert --a plasmid --;
- and
- ✓ line 3, delete "said DNA" and insert
- said plasmid --.

46. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof encoding a polypeptide capable of binding retinoic acid and functioning as a receptor from

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a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim ⁵⁹38.

~~In claim 47, line 1, delete "24" and insert --46-- therefor.~~

~~In claim 48, line 1, delete "24" and insert --47-- therefor.~~

~~In claim 50, line 1, delete "46" and insert --48-- therefor.~~

~~In claim 55, line 2, delete "DNA" and insert --a plasmid--;~~

and

~~line 3, delete "said DNA" and insert
--said plasmid--.~~

Please add the following new claim:

--57. A cloned DNA sequence encoding a polypeptide of *hap* gene, wherein the DNA sequence has a formula selected from the group consisting of:

(a) GTCAGGAATGACAGGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGC;

(b) GCTGAGTTGGACCATCTACAGAGAAGATCCGA;

(c) GGGGTCAGTCACCACTCGTGCAA;

(d) AATGACAGGAACAAGAAAAAGAAGGAGACT;

(e) ATGTTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGGCAAATCCTCGATT

TCTACACTGCGAGTCCGTCTTCTGTCATGCTCCAGGAGAAAGCTCTCAAAGCATGC

TTCAGTGGATTGACCCAAACCGAATGGCAGCATCGGCACACTGCTCAATCA; and

(f) CATGAACCCTTGACCCCAAGTTCAAGTGGGAACACAGCAGAGCACACTCCTA

GCATCTCACCCAGCTCAGTGGAAAACAGTGGGGTCACTCAGTCACCACTCGTGCAA.--

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a"